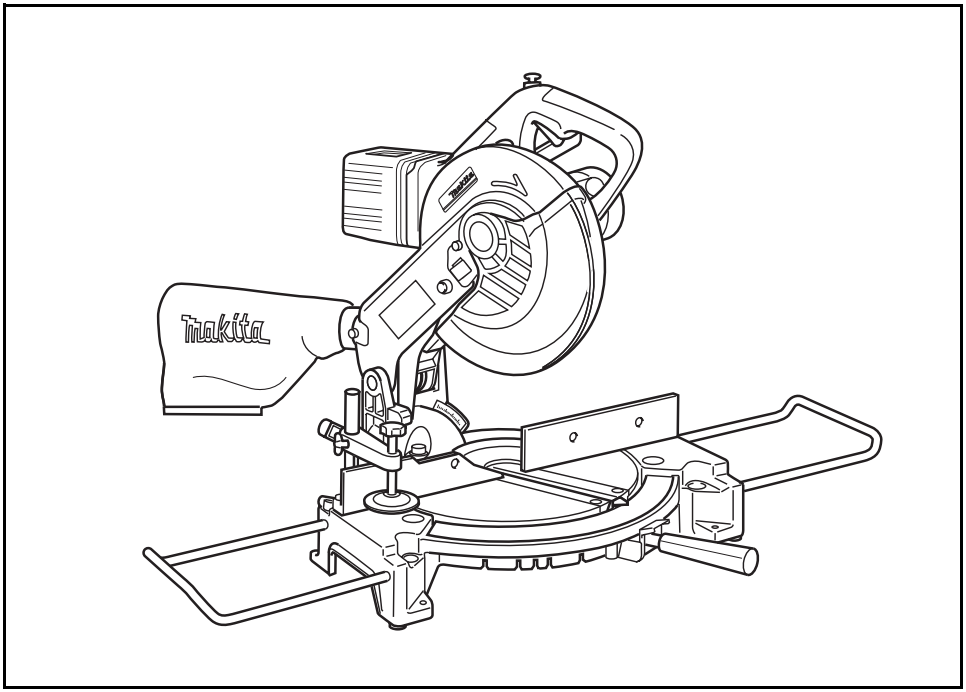
Cordless Compound Miter Saw

BLS820



SPECIFICATIONS

Model **BLS820**

Blade diameter ..... 210 mm – 216 mm
Hole (arbor) diameter
For European countries ..... 30 mm
For all other countries ..... 25.4 mm or 25 mm
For North and Central American countries ..... 15.88 mm
Max. cutting capacities (H x W) with blade 216 mm in diameter

Miter angle	Bevel angle	
	0°	45° (left)
0°	61 mm x 122 mm	45 mm x 122 mm
45° (left and right)	61 mm x 85 mm	45 mm x 85 mm

No load speed (min^{-1}) 2,300
Dimensions (L x W x H) ..... 528 mm x 430 mm x 486 mm
Net weight (with battery cartridge) ..... 10.1 kg
Rated Voltage ..... D.C. 24 V

- Due to our continuing program of research and development, the specifications herein are subject to change without notice.
- Note: Specifications may differ from country to country.

For European countries only

Noise and Vibration

ENG015-1

The typical A-weighted noise levels are
sound pressure level: 91 dB (A)
sound power level: 104 dB (A)
Uncertainty is 3 dB (A).
– Wear ear protection. –

The typical weighted root mean square acceleration value is not more than 2.5 m/s^2.
These values have been obtained according to EN61029.

EC-DECLARATION OF CONFORMITY

ENH004-4

We declare under our sole responsibility that this product is in compliance with the following standards of standardized documents,

EN61029, EN55014

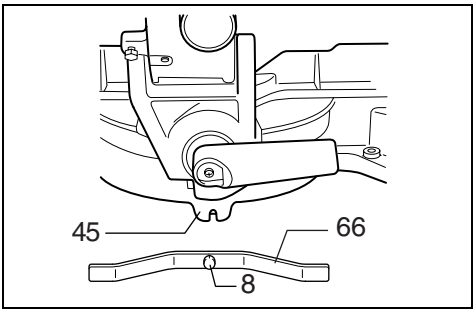
in accordance with Council Directives, 89/336/EEC and 98/37/EC.

Yasuhiko Kanzaki **CE 2005**

Director

MAKITA INTERNATIONAL EUROPE LTD.
Michigan Drive, Tongwell, Milton Keynes,
Bucks MK15 8JD, ENGLAND

Responsible manufacturer:
Makita Corporation Anjo Aichi Japan



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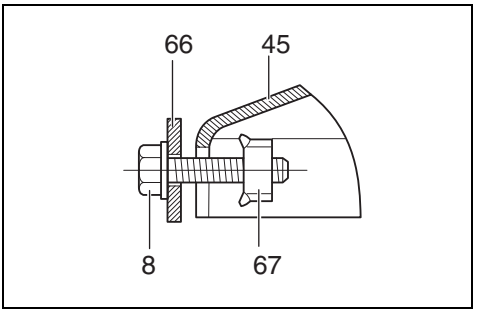

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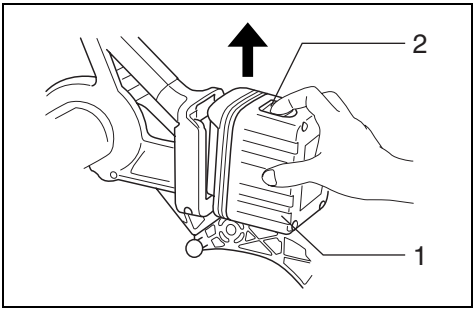

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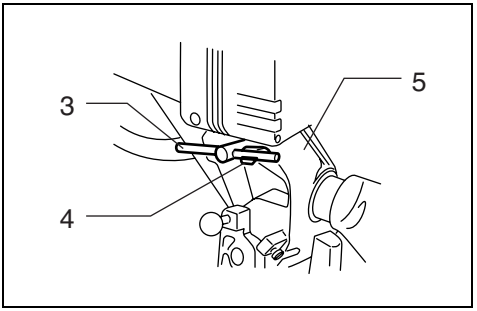

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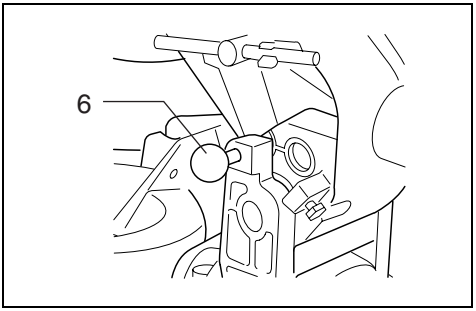

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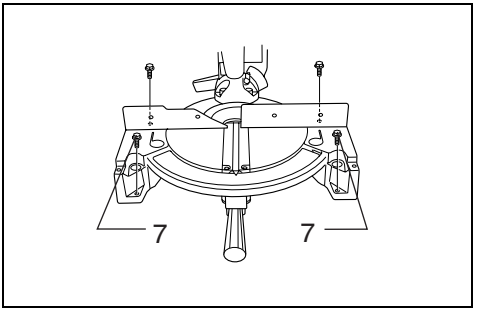

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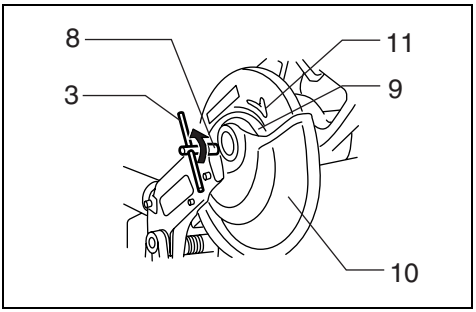

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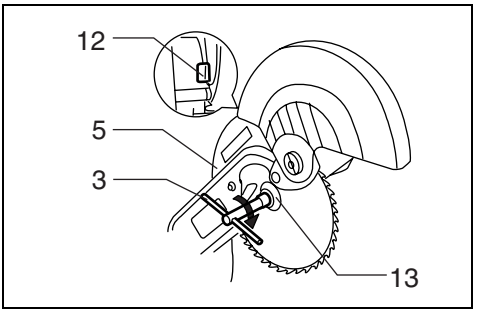

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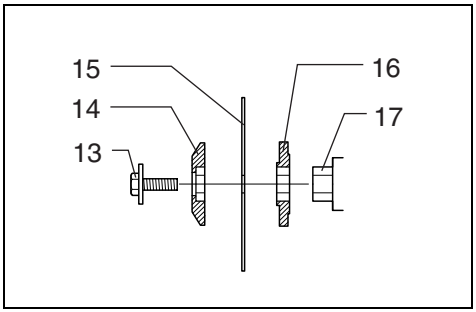

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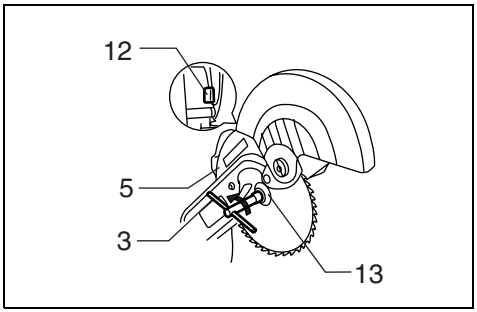

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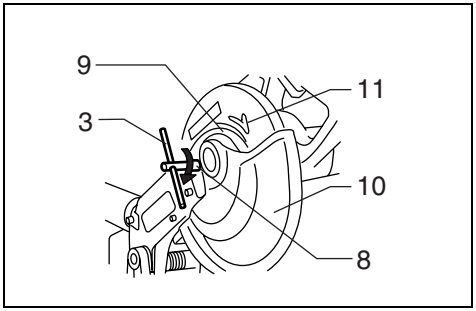

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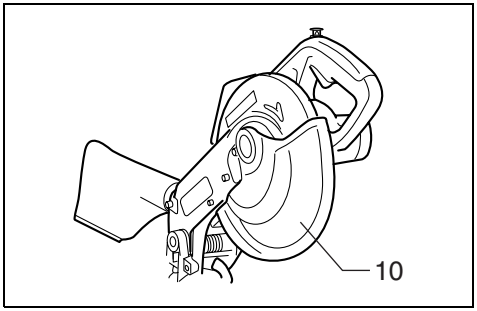

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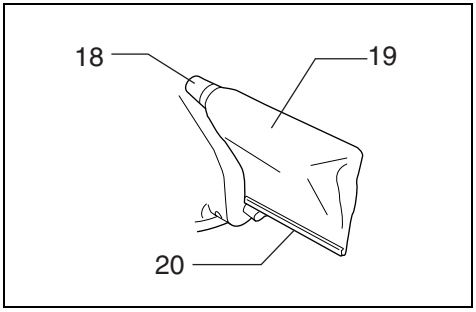

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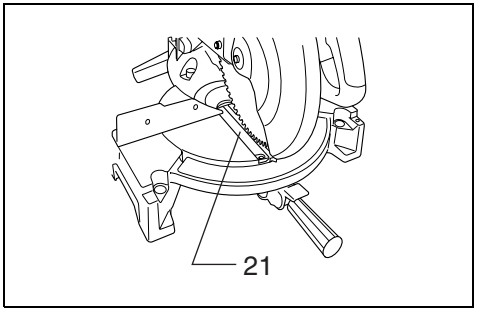

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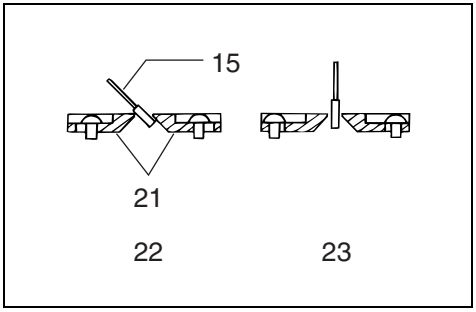

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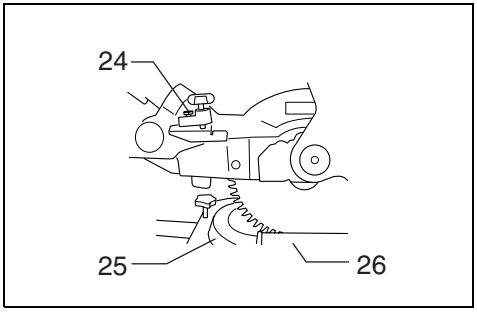

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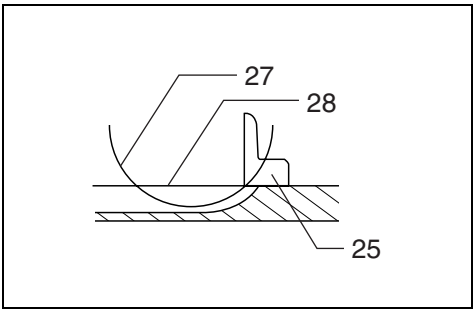

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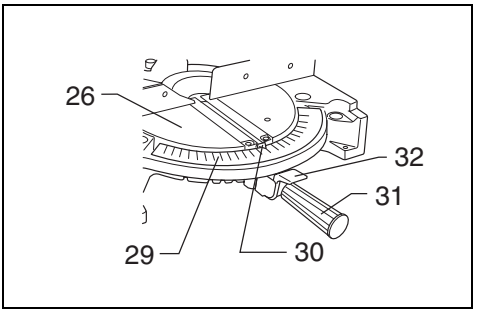

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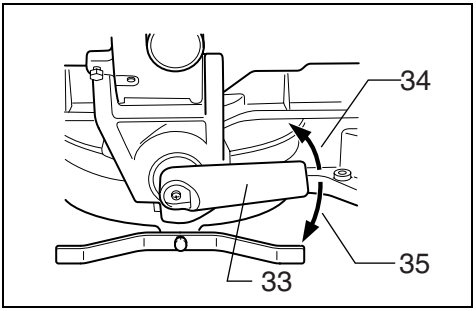

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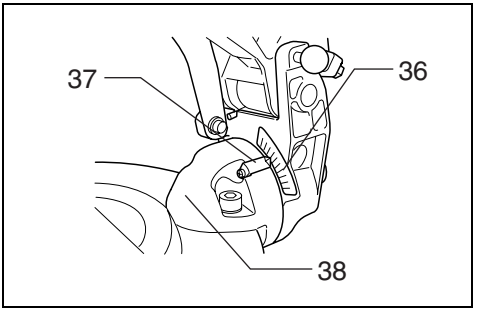

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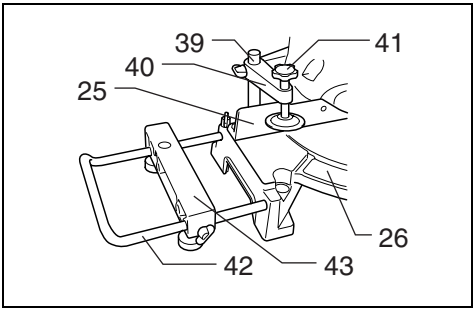

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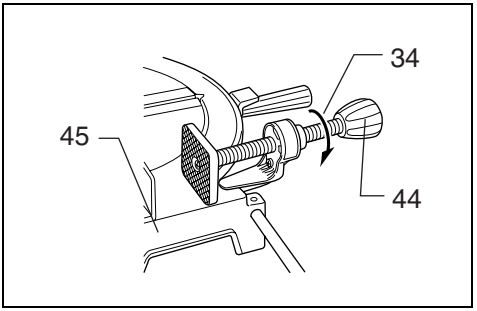

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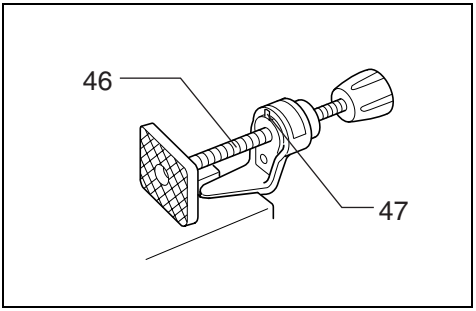

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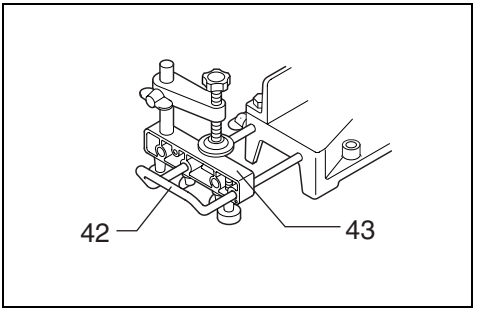

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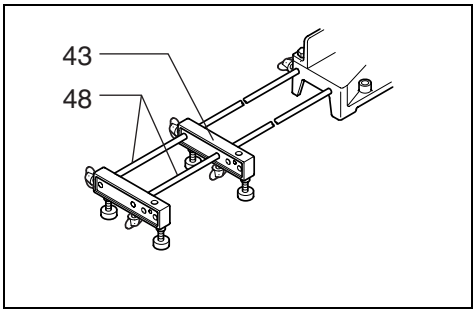

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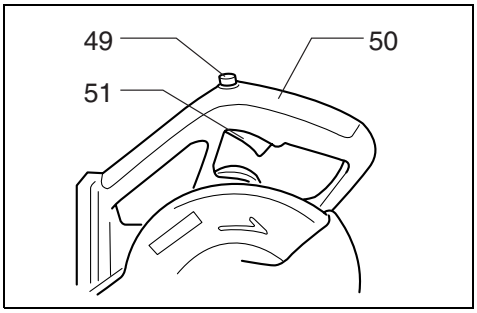

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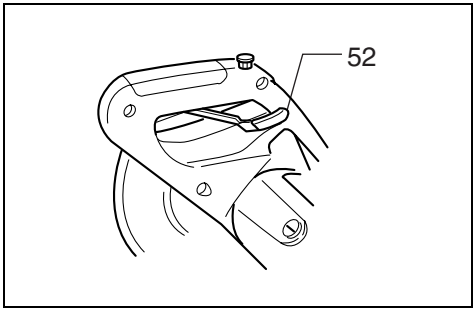

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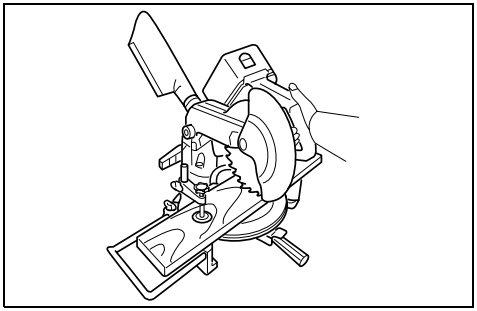

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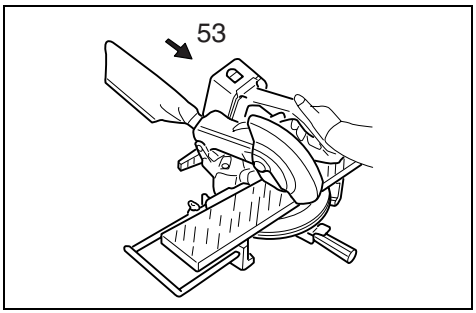

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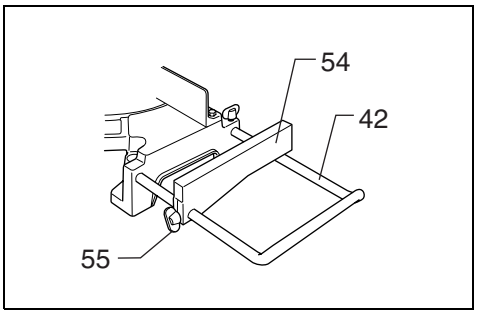

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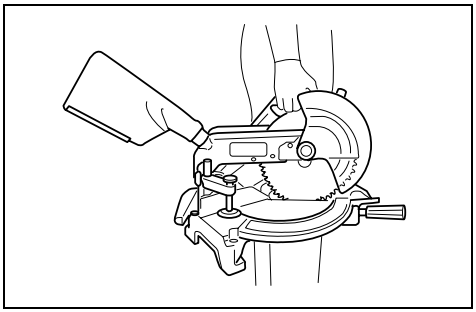

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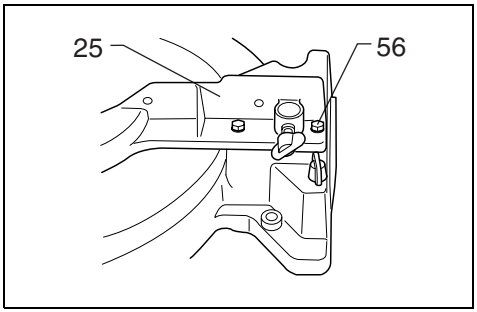

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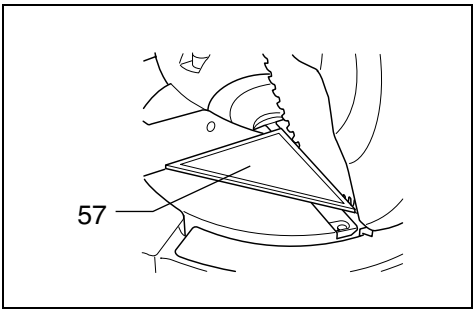

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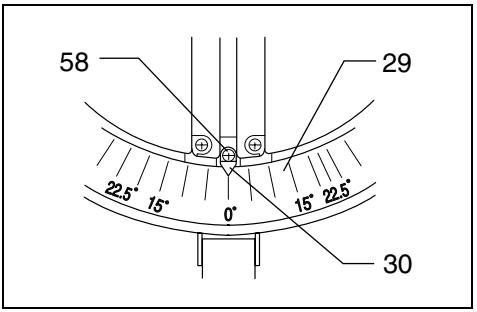

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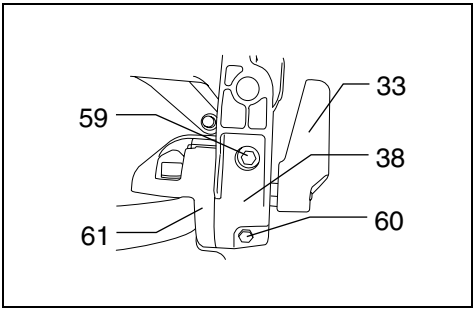

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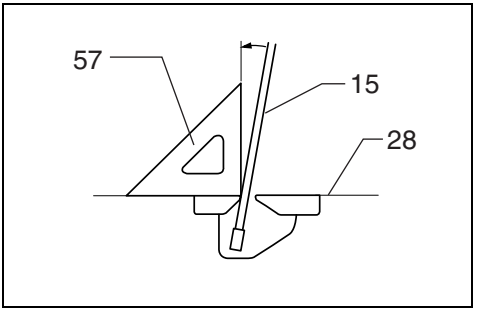

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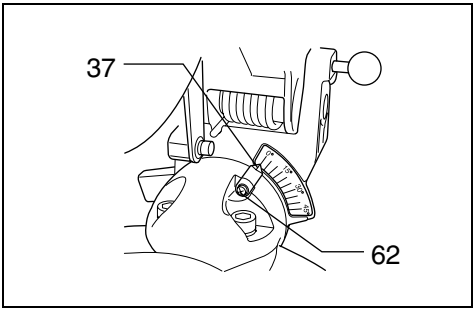

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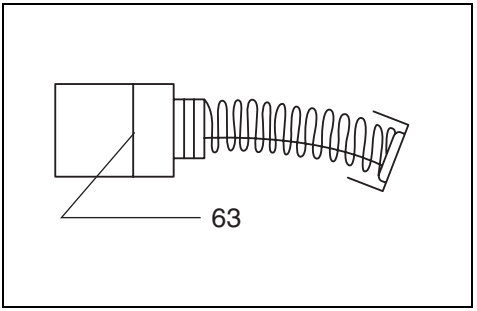

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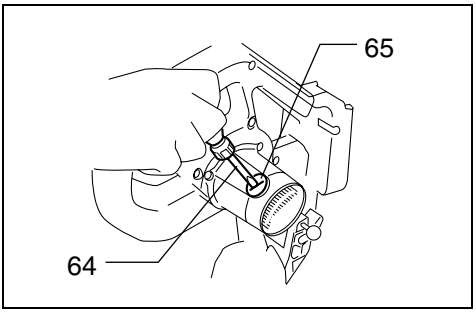

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Symbols

The followings show the symbols used for the tool. Be sure that you understand their meaning before use.

❏ For your safety, remove the chips, small pieces, etc. from the table top before operation.

❏ To avoid injury from flying debris, keep holding the saw head down, after making cuts, until the blade has come to a complete stop.

❏ Only for EU countries

Do not dispose of electric equipment together with household waste material!

In observance of European Directive 2002/96/EC on waste electrical and electronic equipment and its implementation in accordance with national law, electric equipment that have reached the end of their life must be collected separately and returned to an environmentally compatible recycling facility.

Explanation of general view

1 Battery cartridge
2 Button
3 Socket wrench
4 Wrench holder
5 Blade case
6 Stopper pin
7 Bolts
8 Hex bolt
9 Center cover
10 Safety cover (Safety guard)
11 Arrow
12 Shaft lock
13 Hex bolt (left-handed)
14 Outer flange
15 Saw blade
16 Inner flange
17 Spindle
18 Dust nozzle
19 Dust bag
20 Fastener
21 Kerf board
22 Left bevel cut
23 Straight cut
24 Adjusting bolt
25 Guide fence
26 Turn base
27 Periphery of blade
28 Top surface of turn base
29 Miter scale
30 Pointer
31 Grip
32 Lock lever
33 Lever
34 Loosen
35 Tighten
36 Bevel scale
37 Pointer
38 Arm
39 Vise rod
40 Vise arm
41 Vise knob
42 Holder
43 Holder assembly
44 Vise knob
45 Base
46 Vise shaft
47 Projection
48 Rods 12
49 Lock-off button
50 Handle
51 Switch trigger
52 Lock lever
53 Apply pressure in parallel with blade
54 Set plate
55 Screw
56 Hex bolt
57 Triangular rule
58 Screw
59 45° bevel angle adjusting bolt
60 0° bevel angle adjusting bolt
61 Sub arm
62 Screw
63 Limit mark
64 Screwdriver
65 Brush holder cap
66 Auxiliary plate
67 Nut

SAFETY INSTRUCTIONS

WARNING! When using battery operated tools basic safety precautions, including the following, should be followed to reduce the risk of fire, leaking batteries and personal injury: Read these instructions before operating this product and save these instructions.

For safe operation:

1. **Keep work area clean**
   – Cluttered areas and benches invite injuries.
2. **Consider the work environment**
   – Do not expose the tool to rain. Keep work area well lit. Do not use tools in the presence of flammable liquids or gases.
3. **Keep children away**
   – Do not let visitors touch the tool. Keep visitors away from work area.
4. **Store batteries or idle tools**
   – When not in use, tools and batteries should be stored separately in a dry, high or locked up place, out of reach of children.
   – Ensure that battery terminals cannot be shorted by other metal parts such as screws, nails, etc.
5. **Do not force the tool**
   – It will do the job better and safer at the rate for which it was intended.
6. **Use the right tool**
   – Do not force small tools or attachments to do the job of a heavy duty tools. Do not use tools for purposes not intended.
7. **Dress properly**
   – Do not wear loose clothing or jewellery, they can be caught in moving parts. Non-skid footwear is recommended when working outdoors. Wear protecting hair covering to contain long hair.
8. **Use protective equipment**
   – Use safety glasses and if the cutting operation is dusty, a face or dust mask.
9. **Connect dust extraction equipment**
   – If devices are provided for the connection of dust extraction and collection ensure these are connected and properly used.
10. **Do not abuse the supply cord (if fitted)**
    – Never carry the tool by the cord or yank it to disconnect from the socket. Keep the cord away from heat, oil and sharp edges.
11. **Secure the work**
    – Use clamps or a vice to hold the work. It is safer than using your hand and it frees both hands to operate the tool.
12. **Do not over-reach**
    – Keep proper footing and balance at all times.
13. **Maintain tools with care**
    – Keep cutting tools sharp and clean for better and safer performance. Follow instructions for lubrication and changing accessories. Inspect tool cords periodically and if damaged have repaired by an authorized service facility.
14. **Disconnect tools**
    – Where the design permits, disconnect the tool from its battery pack when not in use, before servicing and when changing accessories such as blades, bits and cutters.
15. **Remove adjusting keys and wrenches**
    – Form the habit of checking to see that keys and adjusting wrenches are removed from the tool before turning it on.
16. **Avoid unintentional starting**
    – Do not carry the tool with a finger on the switch.
17. **Stay alert**
    – Watch what you are doing. Use common sense. Do not operate the tool when you are tired.

18. **Check damaged parts**
   – Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, free running of moving parts, breakage of parts, mounting and any other condition that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced by an authorized service facility unless otherwise indicated in this instruction manual. Have defective switches replaced by an authorized service facility. Do not use the tool if the switch does not turn it on and off.
19. **Warning**
   – The use of any accessory or attachment, other than recommended in this instruction manual, may present a risk of personal injury.
   – Ensure that the battery pack is correct for the tool.
   – Ensure that the outside surface of battery pack or tool is clean and dry before plugging into charger.
   – Ensure that batteries are charged using the correct charger recommended by the manufacturer. Incorrect use may result in a risk of electric shock, overheating or leakage of corrosive liquid from the battery.
20. **Have your tool repaired by a qualified person**
   – This tool is constructed in accordance with the relevant safety requirements. Repairs should only be carried out by qualified persons using original spare parts, otherwise this may result in considerable danger to the user.
21. **Disposal of battery**
   – Ensure battery is disposed of safety as instructed by the manufacturer.

IMPORTANT SAFETY INSTRUCTIONS FOR BATTERY CARTRIDGE

ENC005-1

1. **Before using battery cartridge, read all instructions and cautionary markings on (1) battery charger, (2) battery, and (3) product using battery.**
2. **Do not disassemble battery cartridge.**
3. **If operating time has become excessively shorter, stop operating immediately. It may result in a risk of overheating, possible burns and even an explosion.**
4. **If electrolyte gets into your eyes, rinse them out with clear water and seek medical attention right away. It may result in loss of your eyesight.**
5. **Do not short the battery cartridge:**
   (1) Do not touch the terminals with any conductive material.
   (2) Avoid storing battery cartridge in a container with other metal objects such as nails, coins, etc.
   (3) Do not expose battery cartridge to water or rain.

   A battery short can cause a large current flow, overheating, possible burns and even a breakdown.
6. **Do not store the tool and battery cartridge in locations where the temperature may reach or exceed 50°C (122°F).**
7. **Do not incinerate the battery cartridge even if it is severely damaged or is completely worn out. The battery cartridge can explode in a fire.**
8. **Be careful not to drop or strike battery.**

SAVE THESE INSTRUCTIONS.

Tips for maintaining maximum battery life

1. **Charge the battery cartridge before completely discharged.**
   Always stop tool operation and charge the battery cartridge when you notice less tool power.
2. **Never recharge a fully charged battery cartridge. Overcharging shortens the battery service life.**
3. **Charge the battery cartridge with room temperature at 10°C – 40°C (50°F – 104°F). Let a hot battery cartridge cool down before charging it.**
4. **Charge the Nickel Metal Hydride battery cartridge when you do not use it for more than six months.**

ADDITIONAL SAFETY RULES FOR TOOL

ENB041-3

1. **Be aware that this tool is always in an operating condition, because it does not have to be plugged into an electrical outlet.**
2. **Wear eye protection.**
3. **Keep hands out of path of saw blade. Avoid contact with any coasting blade. It can still cause severe injury.**
4. **Do not operate saw without guards in place. Check blade guard for proper closing before each use. Do not operate saw if blade guard does not move freely and close instantly. Never clamp or tie the blade guard into the open position.**
5. **Do not perform any operation freehand. The workpiece must be secured firmly against the turn base and guide fence with the vise during all operations. Never use your hand to secure the workpiece.**
6. **Never reach around saw blade.**
7. **Turn off tool and wait for saw blade to stop before moving workpiece or changing settings.**
8. **Remove battery from tool before chaging blade or servicing.**
9. **Don't use the tool in the presence of flammable liquids or gases.**
10. **Check the blade carefully for cracks or damage before operation. Replace cracked or damaged blade immediately.**
11. **Use only flanges specified for this tool.**
12. **Be careful not to damage the arbor, flanges (especially the installing surface) or bolt. Damage to these parts could result in blade breakage.**
13. **Make sure that the turn base is properly secured so it will not move during operation.**
14. **For your safety, remove the chips, small pieces, etc. from the table top before operation.**
15. **Avoid cutting nails. Inspect for and remove all nails from the workpiece before operation.**
16. **Make sure the shaft lock is released before the switch is turned on.**
17. **Be sure that the blade does not contact the turn base in the lowest position.**

18. **Hold the handle firmly. Be aware that the saw moves up or down slightly during start-up and stopping.**
19. **Make sure the blade is not contacting the workpiece before the switch is turned on.**
20. **Before using the tool on an actual workpiece, let it run for a while. Watch for vibration or wobbling that could indicate poor installation or a poorly balanced blade.**
21. **Wait until the blade attains full speed before cutting.**
22. **Stop operation immediately if you notice anything abnormal.**
23. **Do not attempt to lock the trigger in the on position.**
24. **Be alert at all times, especially during repetitive, monotonous operations. Don't be lulled into a false sense of security. Blades are extremely unforgiving.**
25. **Always use accessories recommended in this manual. Use of improper accessories such as abrasive wheels may cause an injury.**
26. **Do not use the saw to cut other than wood or similar materials.**
27. **Connect miter saws to a dust collecting device when sawing.**
28. **Select saw blades in relation to the material to be cut.**
29. **Take care when slotting.**
30. **Replace the kerf board when worn.**

Do not use saw blades manufactured from high speed steel.
Some dust created from operation contains chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:
- lead from lead-based-painted material and,
- arsenic and chromium from chemically-treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work.
To reduce your exposure to these chemicals: work in a well ventilated area and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.
To reduce the emitted noise, always be sure that the blade is sharp and clean.
The operator is adequately trained in the use, adjustment and operation of the machine.
Use correctly sharpened saw blades. Observe the maximum speed marked on the saw blade.
Refrain from removing any cut-offs or other parts of the workpiece from the cutting area whilst the machine is running and the saw head is not in the rest position.

SAVE THESE INSTRUCTIONS.

OPERATING INSTRUCTIONS

Installing auxiliary plate (Fig. 1 & 2)
Always installing the auxiliary plate using the notch in the tool's base and secure it by tightening the hex bolt before operation.

Installing or removing battery cartridge (Fig. 3)
- Always switch off the tool before insertion or removal of the battery cartridge.
- To remove the battery cartridge, withdraw it from the tool while sliding the button on the side of the cartridge.
- To insert the battery cartridge, align the tongue on the battery cartridge with the groove in the housing and slip it into place. Always insert it all the way until it locks in place with a little click. If not, it may accidentally fall out of the tool, causing injury to you or someone around you.
- Do not use force when inserting the battery cartridge. If the cartridge does not slide in easily, it is not being inserted correctly.

Socket wrench (Fig. 4)
The socket wrench is stored as shown in **Fig. 4**. When using the socket wrench, pull it out of the wrench holder. After using the socket wrench, return it to the wrench holder.

Bench mounting saw (Fig. 5 & 6)
When the tool is shipped, the handle is locked in the lowered position by the stopper pin. Release the stopper pin by lowering the handle slightly and pulling the stopper pin.
This tool should be bolted with four bolts to a level and stable surface using the bolt holes provided in the tool's base. This will help prevent tipping and possible injury.

Installing or removing saw blade
CAUTION:
- Always be sure that the tool is switched off and the battery cartridge is removed before installing or removing the blade.
- Use only the Makita socket wrench provided to install or remove the blade. Failure to do so may result in overtightening or insufficient tightening of the hex bolt. This could cause serious injury to operator or others in the general vicinity of the tool.

Lock the handle in the raised position by pushing in the stopper pin. **(Fig. 5)**
To remove the blade, use the socket wrench to loosen the hex bolt holding the center cover by turning it counterclockwise. Raise the safety cover and center cover. **(Fig. 7)**
Press the shaft lock to lock the spindle and use the socket wrench to loosen the hex bolt (left-handed) clockwise. Then remove the hex bolt, outer flange and blade. **(Fig. 8)**
To install the blade, mount it carefully onto the spindle, making sure that the direction of the arrow on the surface of the blade matches the direction of the arrow on the blade case. Install the outer flange and hex bolt, and then use the socket wrench to tighten the hex bolt (left-handed) securely counterclockwise while pressing the shaft lock. **(Fig. 9 & 10)**

CAUTION:
For all countries other than European countries
The inner flange has a 25 mm diameter on one side and a 25.4 mm diameter on the other. The side with 25.4 mm diameter is marked by "25.4". Use the correct side for the hole diameter of the blade you intend to use. Mounting the blade on the wrong side can result in dangerous vibration.

Return the safety cover and center cover to its original position. Then tighten the hex bolt clockwise to secure the center cover. **(Fig. 11)**
Release the handle from the raised position by pulling the stopper pin. Lower the handle to make sure that the safety cover moves properly.

Safety cover (Fig. 12)
When lowering the handle, the safety cover rises automatically. The cover returns to its original position when the cut is completed and the handle is raised. NEVER DEFEAT OR REMOVE THE SAFETY COVER. In the interest of your personal safety, always maintain the safety cover in good condition. Any irregular operation of the safety cover should be corrected immediately. NEVER USE THE TOOL WITH A FAULTY SAFETY COVER. If the see-through safety cover becomes dirty, or sawdust adheres to it in such a way that the blade and/or workpiece is no longer easily visible, remove the battery cartridge and clean the cover carefully with a damp cloth. Do not use solvents or any petroleum-based cleaners on the plastic cover.

Dust bag (Fig. 13)
The use of the dust bag makes cutting operations clean and dust collection easy. To attach the dust bag, fit the bag's entry port over the dust nozzle. When the dust bag is about half full, remove the dust bag from the tool and pull the fastener out. Empty the dust bag of its contents, tapping it lightly so as to remove particles adhering to the insides which might hamper further collection.

Positioning kerf board (Fig. 14 & 15)
This tool is provided with the kerf boards in the turn base. The kerf boards are factory adjusted so that the saw blade does not contact the kerf boards. Before use, adjust the kerf boards as follows:
First, remove the battery cartridge. Loosen the all screws (2 each on left and right) securing the kerf boards. Re-tighten them to the extent that the kerf boards can be easily moved by hand. Lower the handle fully and push in the stopper pin to lock the handle in the lowered position. Adjust the kerf boards so that the kerf boards just contact the sides of blade teeth slightly. Tighten the screws (do not tighten firmly). After adjusting the kerf boards, release the stopper pin and raise the handle. Then tighten the all screws securely.

CAUTION:
After changing the bevel angle, always readjust the kerf boards as described above.

Maintaining maximum cutting capacity (Fig. 16 & 17)
This tool is factory adjusted to provide the max. cutting capacity for a 216 mm saw blade. When using a saw blade other than 216 mm saw blade, adjust the lower limit position of the blade as follows:
First, remove the battery cartridge. Lower the handle completely. Use the socket wrench to turn the adjusting bolt until the periphery of the blade extends slightly below the top surface of the turn base at the point where the front face of the guide fence meets the top surface of the turn base. With the battery cartridge removed, rotate the blade by hand while holding the handle all the way down to be sure that the blade does not contact any part of the lower base. Re-adjust slightly, if necessary.

CAUTION:
After installing a new blade, always be sure that the blade does not contact any part of the lower base when the handle is lowered completely. Always do this with the battery cartridge removed.

Positioning for adjusting the miter angle (Fig. 18)
The turn base turns up to 52° to the left and right. Loosen the grip by turning counterclockwise. Turn the turn base while pressing down the lock lever. When you have moved the grip to the position where the pointer points to the desired angle on the miter scale, securely tighten the grip clockwise.

CAUTION:
- When turning the turn base, be sure to raise the handle fully.
- After changing the miter angle, always secure the turn base by tightening the grip firmly.

Positioning for adjusting the bevel angle (Fig. 19 & 20)
The saw blade tilts up to 45° to the left. To adjust the bevel angle, loosen the lever at the rear of the tool. Push the handle to the left to tilt the saw blade until the pointer points to the desired angle on the bevel scale. Tighten the lever to secure the arm.

CAUTION:
- When tilting the saw blade, be sure to raise the handle fully.
- After changing the bevel angle, always secure the arm by tightening the lever.

Securing workpiece

WARNING:
It is extremely important to always secure the workpiece properly and tightly with the vise. Failure to do so can cause the tool to be damaged and/or the workpiece to be destroyed. PERSONAL INJURY MAY ALSO RESULT. Also, after a cutting operation, DO NOT raise the blade until the blade has come to a complete stop.

1. Vertical vise **(Fig. 21)**
   The vertical vise can be installed in two positions on either the left or right side of the guide fence, or the holder assembly (optional accessory). Insert the vise rod into the hole in the guide fence or the holder assembly and tighten the screw to secure the vise rod. (Note: When using the holder assembly, install it on the holder as shown in **Fig. 21**.)
   Position the vise arm according to the thickness and shape of the workpiece and secure the vise arm by tightening the screw.
   Make sure that no part of the tool contacts the vise when lowering the handle fully. If some part contacts the vise, re-position the vise. Press the workpiece flat against the guide fence and the turn base. Position the workpiece at the desired cutting position and secure it firmly by tightening the vise knob. The maximum thickness of workpieces which can be secured by the vertical vise is 61 mm.

2. Horizontal vise (optional accessory) **(Fig. 22 & 23)**
   The horizontal vise can be installed on either the left or right side of the base. By turning the vise knob counterclocwise, the screw is released and the vise shaft can be moved rapidly in and out. To grip workpieces, turn the vise knob gently clockwise until the projection reaches its topmost position, then fasten securely. If the vise knob is forced in or pulled out while being turned clockwise, the projection may stop at an angle. In this case, turn the vise knob back counterclockwise until the screw is released, before turning again gently clockwise. The maximum width of workpieces which can be secured by the horizontal vise is 122 mm.
3. Holders and holder assembly (optional accessory)
   The holders and the holder assembly can be installed on either side as a convenient means of supporting workpieces horizontally. Install them as shown in **Fig. 24**. Then tighten the screws firmly to secure the holders and the holder assembly. **(Fig. 24)**
   When cutting long workpieces, use the holder-rod assembly (optional accessory). It consists of two holder assemblies and two rods 12. **(Fig. 25)**

   CAUTION:
   Always support long workpieces level with the top surface of the turn base for accurate cuts and to prevent dangerous loss of control of the tool.

Switch action (Fig. 26)

CAUTION:
- Before inserting the battery cartridge into the tool, always check to see that the switch trigger actuates properly and returns to the “OFF” position when released.
- When not using the tool, remove the lock-off button and store it in a secure place. This prevents unauthorized operation.

To prevent the switch trigger from being accidentally pulled, a lock-off button is provided.
To start the tool, press in the lock-off button and pull the trigger. Release the switch trigger to stop.

Lock lever (Fig. 27)

For European countries only
When cutting, push the lock lever to the left to release the handle from the raised position. When the cut is completed, release the lock lever after returning the blade to its fully elevated position. The handle will be automatically locked in the raised position.

Operation

CAUTION:
Do not apply excessive pressure on the handle when cutting. Too much force may result in overload of the motor and/or decreased cutting efficiency.

1. Press cutting **(Fig. 28)**
   - Workpieces up to 61 mm high x 122 mm wide can be cut in the following way.
   - Secure the workpiece with the vise. Switch on the tool and wait until the blade attains full speed before lowering gently into the cut. When the cut is completed, switch off the tool and WAIT UNTIL THE BLADE HAS COME TO A COMPLETE STOP before returning the blade to its fully elevated position.
2. Miter cutting
   Refer to the previously covered “Positioning for adjusting the miter angle”.
3. Bevel cut **(Fig. 29)**
   - At a left 45° bevel angle, workpieces up to 45 mm high x 122 mm wide can be cut.
   - Loosen the lever and tilt the saw blade to set the bevel angle. Refer to the previously covered “Positioning for adjusting the bevel angle”. Secure the workpiece with the vise. Switch on the tool and wait until the blade attains full speed. Then gently lower the handle to the fully lowered position while applying pressure in parallel with the blade. When the cut is completed, switch off the tool and WAIT UNTIL THE BLADE HAS COME TO A COMPLETE STOP before returning the blade to its fully elevated position.

   CAUTION:
   - During a bevel cut, it may create a condition whereby the piece cut off will come to rest against the side of the blade. If the blade is raised while the blade is still rotating, this piece may be caught by the blade, causing fragments to be scattered around which is dangerous. The blade should be raised ONLY after the blade has come to a complete stop.
   - When pressing down the handle, apply pressure in parallel with the blade. If a force is applied perpendicularly to the turn base or if the pressure direction is changed during a cut, the precision of the cut will be impaired.
4. Compound cutting
   Compound cutting is the process in which a bevel angle is made at the same time in which a miter angle is being cut on a workpiece. Compound cutting can be performed at angle shown in the table below.

Miter angle	Bevel angle
Left and right 45°	Left 0° – 45°
Left and right 52°	Left 0° – 40°

   At the miter angle of left 45° and bevel angle of left 45°, workpieces 45 mm high x 85 mm wide can be cut. When performing compound cutting, refer to “Press cutting”, “Miter cutting” and “Bevel cut” explanations.

5. Cutting repetitive lengths **(Fig. 30)**
   When cutting several pieces of stock to the same length, ranging from 220 mm to 365 mm, use of the set plate (optional accessory) will facilitate more efficient operation. Install the set plate on the holder as shown in **Fig. 30**. Align the cutting line on your workpiece with either the left or right side of the groove in the kerf board, and while holding the workpiece from moving, move the set plate flush against the end of the workpiece. Then secure the set plate with the screw. When the set plate is not used, loosen the screw and turn the set plate out of the way.

   NOTE:
   Use of the holder-rod assembly (optional accessory) allows cutting repetitive lengths, ranging from 220 mm to 2,230 mm.

Carrying tool (Fig. 5 & 31)
Make sure that the battery cartridge is removed. Secure the blade at 0° bevel angle and the turn base at 52° miter angle to the right. Lower the handle fully and lock it in the lowered position by pushing in the stopper pin. Carry the tool by the carrying grip as shown in **Fig. 31**.

MAINTENANCE

CAUTION:
Always be sure that the tool is switched off and the battery cartridge is removed before carrying out any work on the tool.

Adjusting the cutting angle
This tool is carefully adjusted and aligned at the factory, but rough handling may have affected the alignment. If your tool is not aligned properly, perform the following:

1. Miter angle
   Loosen the grip which secures the turn base. Turn the turn base so that the pointer points to 0° on the miter scale. Then turn the turn base slightly clockwise and counterclockwise to seat the turn base cozily in the 0° miter notch. (Leave as it is if the pointer does not point to 0°.) Loosen the four hex bolts securing the guide fence using the socket wrench. **(Fig. 32)**
   Lower the handle fully and lock it in the lowered position by pushing in the lock pin. Square the side of the blade with the face of the guide fence using a triangular rule, try square, etc. Then securely tighten the hex bolts on the guide fence in the order from right side. **(Fig. 33)**
   Make sure that the pointer points to 0° on the miter scale. If the pointer does not point to 0°, loosen the screw which secures the pointer and adjust the pointer so that it will point to 0°. **(Fig. 34)**
2. Bevel angle
   i) 0° bevel angle
      Lower the handle fully and lock it in the lowered position by pushing in the lock pin. Loosen the lever at the rear of the tool. Turn the 0° bevel angle adjusting bolt (lower bolt) on the right side of the arm two or three revolutions counterclockwise to tilt the blade to the right. **(Fig. 35)**
      Carefully sqaure the side of the blade with the top surface of the turn base using the triangular rule, try square, etc. by turning the 0° bevel angle adjusting bolt clockwise. Then tighten the lever securely. **(Fig. 36)**
      Make sure that the pointer on the sub arm points to 0° on the bevel scale on the arm. If it does not point to 0°, loosen the screw which secures the pointer and adjust the pointer so that it will point to 0°. **(Fig. 37)**
   ii) 45° bevel angle
      Adjust the 45° bevel angle only after performing 0° bevel angle adjustment. To adjust left 45° bevel angle, loosen the lever and tilt the blade 45° to the left. Make sure that the pointer on the sub arm points to 45° on the bevel scale on the arm. If the pointer does not point to 45°, turn the 45° bevel angle adjusting bolt (upper bolt) on the right side of the arm until the pointer points to 45°. **(Fig. 35)**

Replacement of carbon brushes (Fig. 38 & 39)
Remove and check the carbon brushes regularly. Replace when they wear down to the limit mark. Keep the carbon brushes clean and free to slip in the holders. Both carbon brushes should be replaced at the same time. Use only identical carbon brushes.

Use a screwdriver to remove the brush holder caps. Take out the worn carbon brushes, insert the new ones and secure the brush holder caps.

To maintain product safety and reliability, repairs, maintenance or adjustment should be carried out by a Makita Authorized Service Center.

ACCESSORIES

CAUTION:
- These accessories or attachments are recommended for use with your Makita tool specified in this manual. The use of any other accessories or attachments might present a risk of injury to persons. Only use accessory or attachment for its stated purpose.

If you need any assistance for more details regarding these accessories, ask your local Makita service center.

- Dust bag
- Holder
- Socket wrench 10
- Triangular rule
- Auxiliary plate
- Lock-off button (Switch button)
- Vertical vise
- Carbide-tipped saw blade
- Safety goggle
- Vise assembly (Horizontal vise)
- Set plate
- Holder assembly
- Various type of Makita genuine batteries and chargers

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